



CRS Report for Congress

The U.S. Farm Economy

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Summary

According to USDA's Economic Research Service (ERS), national net farm income — a key indicator of U.S. farm well-being — is expected to rise to a record \$92.3 billion in 2008, over 4% above the previous year's record (\$88.7 billion) on the strength of higher commodity prices, which are being driven by the outlook for continued strong domestic and international demand and sharply lower stocks for major grains and oilseeds.¹ Consequently, the outlook for the U.S. farm economy as a whole is for another year of record profitability as projected record agricultural cash receipts of \$313.2 billion (up \$28 billion or 10%) more than offset record high production expenses of \$279.2 billion. Government payments are projected up over 11% in 2008 at \$13.7 billion. An increase in ad hoc and emergency program payments are expected to more than offset sharp declines in commodity program payments due to the projected rise in crop prices which, in turn, are expected to reduce price-triggered marketing loan benefits and counter-cyclical payments.

Total farm asset value of \$2,514 billion and total farm debt of \$228 billion are both projected at record levels in 2007. However, the debt-to-asset ratio of 9.1% is down sharply from last year's value of 9.9% and represents the lowest level since 1960, suggesting a strong financial position for the agricultural sector as a whole. This report will be updated as events warrant.

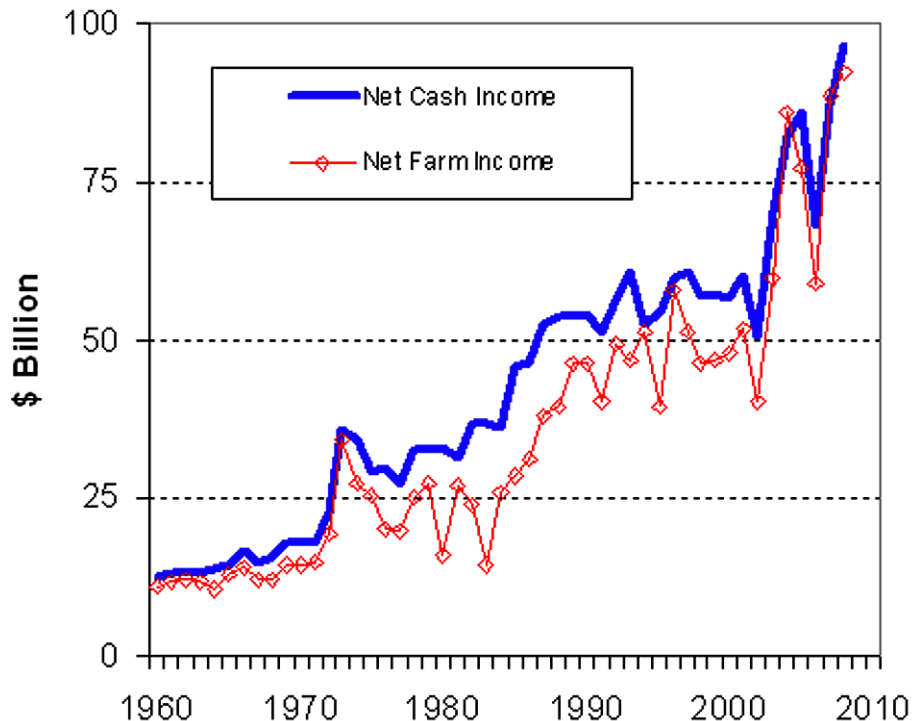
Introduction

Two indicators that measure the economic well-being of the farm economy are net cash income and net farm income. *Net cash income* compares cash receipts to cash expenses. As such, it is a cash flow measure representing the funds that are available to

¹ ERS's 2007 farm sector income forecast, last updated on February 12, 2008, is available at the *Farm Income and Costs Briefing Room*, at [<http://www.ers.usda.gov/Briefing/FarmIncome/nationalestimates.htm>]. Because market prices have risen substantially since these estimates were released (Table 2), it is likely that projections for farm income and receipts will be raised significantly, while outlays for government programs will be lowered when USDA releases its next farm income forecast.

farm operators to meet family living expenses and make debt payments. In contrast, *net farm income* is a value of production measure, indicating the farm operator's share of the net value added to the national economy within a calendar year, independent of whether it is received in cash or a noncash form. Net farm income differs from net cash income by including the value of home consumption, changes in inventories, capital replacement, and implicit rent and expenses related to the farm operator's dwelling that are not reflected in cash transactions during the current year. Net cash income is generally less variable than net farm income. Farmers can manage the timing of crop and livestock sales and of the purchase of inputs to stabilize the variability in their net cash income. For example, farmers can hold crops from large harvests to sell in the forthcoming year when output may be lower and prices higher.

Figure 1. U.S. Farm Income Outlook, 1960 to 2008F



Source: USDA, Economic Research Service, “2008 Farm Income Forecast,” at [<http://www.ers.usda.gov/Briefing/FarmIncome/>]. **Note:** 2008 is projected.

Outlook for Calendar Year 2008

USDA's net farm income estimate for 2008 of \$92.3 billion is up 4% from last year's record \$88.7 billion (**Table 1**). When measured in cash terms, net cash income in 2008 is projected up nearly 11% to \$96.6 billion, well above 2007's record \$87.6 billion (**Figure 1**). From a historical perspective, the past six years, 2003 through 2008, have been exceptionally profitable years in terms of national net cash income averaging nearly \$82 billion per year during that period. The major agricultural producing regions are flush with cash and faced with the outlook for continued high crop prices well into 2008 and beyond.

Cash Receipts. The combined value of cash receipts from marketings of both crop and livestock commodities is projected at \$313.2 billion in 2008, the highest amount on record — up \$28 billion from the previous year's record of \$285.4 billion — and driven entirely by higher crop prices. While crop farmers rejoice, livestock feeders are concerned by the escalating costs of feed.

Crops. The U.S. ethanol industry has grown rapidly since mid-2004, when production capacity was estimated at around 3 billion gallons per year.² The U.S. ethanol sector received a substantial boost in December 2007 when the Energy Independence and Security Act was signed into law [EISA; P.L. 110-140]. EISA greatly expands the mandate for corn-based ethanol use from 4.7 billion gallons in 2007 to 9 billion in 2008 and 15 billion by 2015. This has pushed corn and other crop prices sharply higher. USDA estimates that nearly 25% of the 2007 corn crop will be used to produce ethanol during the 2007/08 (September-August) corn marketing year, and that this share will grow to 33% in 2008/09.³ Higher corn prices have had the effect of raising prices for other field crops, primarily soybeans, that compete with corn for planted area (**Table 2**).

In addition to strong domestic demand, strong export demand, aided in part by a weak dollar, is expected to draw stocks for major grains and oilseeds to historically low levels in 2008, thus supporting higher market prices. Higher crop prices are expected to generate record crop cash receipts in 2008 of \$174.6 billion. Corn cash receipts alone are projected at a record \$48 billion. Cash receipts for other field crops as well as greenhouse and nursery crops, are also expected to rise on strong sales volume.

Livestock. In contrast to the positive outlook for crops, the value of livestock production is forecast down slightly at \$138.7 billion in 2008, as higher prices for feed crops (although beneficial for feed crop producers) raise feed costs for livestock producers. However, continued strong market prices for most major livestock categories — beef, poultry, dairy, and eggs — are projected to partially offset high feed costs and keep cash receipts for livestock near the previous year's record of \$141.4 billion.

Government Payments. Government direct payments are forecast at \$13.4 billion in 2008, up slightly from \$12.0 billion in 2007 but well below the record of \$24.4 billion in 2005. Higher projected market prices are expected to limit payments under the two major price-triggered programs — counter-cyclical payments (CCP), which are projected to decline to less than \$1 billion, and marketing loan benefits (loan deficiency payments, marketing loan gains, and certificate exchange gains), which are projected to fall to less than \$8 million in 2008.⁴ Fixed direct payments, whose payment rates are fixed in legislation and are not affected by the level of program crop prices, are estimated up slightly at \$5.3 billion. Farm disaster assistance and emergency assistance

² For more information see CRS Report RL32712, *Agriculture-Based Renewable Energy Production*.

³ USDA, World Agricultural Outlook Board (WAOB), *World Agricultural Supply and Demand Estimates*, Feb. 8, 2008; and USDA Long-Term Agricultural Projection Tables, Released February, 2008.

⁴ For more information on commodity programs, see CRS Report RL33271, *Farm Commodity Programs: Direct Payments, Counter-Cyclical Payments, and Marketing Loans*, by Jim Monke.

payments — which have figured heavily in sectoral income in most of the previous 20 years (1989-2008)⁵ — are also projected up at \$3.4 billion in 2008.

Production Expenses. Total production expenses are forecast at a nominal record \$279.2 billion in 2008, up \$22.2 billion (9%) from last year's record level. Higher commodity prices are expected to push feed costs up substantially (nearly 18%), while all other expense categories grow at a 7% year-to-year rate. Farm origin inputs, including feed, account for 27% of average farm expenses, and are expected to rise by nearly 9% in aggregate as projected lower livestock costs partially offset higher crop prices. Higher costs for manufactured inputs, interest charges, and general operating expenses all contributed to the surge in costs. Manufactured inputs — such as fuel, fertilizer, electricity, and pesticides — that account for about 17% of national average farm operating expenses are projected up 14%, while interest charges (6% of operating expenses) are projected up a modest 0.4%. Finally, other operating expenses (e.g., repair and maintenance, hired labor, hired custom work, etc.) account for one-third of operating expenses and are also projected to rise by about 8%.

Farm Asset Values and Debt. Farm asset values — which reflect farm investors' and lenders' expectations about long-term profitability of farm sector investments — are projected up 13% in 2008 to a record \$2,514 billion, on the strength of continued growth in real estate values. Farm debt is projected to rise by a much smaller 4% to a record \$228 billion in 2008. As a result, farm equity (defined as asset value minus debt) is projected at a record \$2,286 billion, while the farm debt-to-asset ratio in 2008 is expected to decline at a 49-year low of 9.1%. The U.S. farm debt-to-asset ratio peaked in 1985 at 23%.

Farm Household Income. Average farm-operator household income is projected at a record \$89,343 in 2008, up about 7% from the previous year's record. Off-farm income sources are expected to account for nearly 85% of the national average farm household income in 2008, compared with about 15% from farming activities. However, the share of income from farming increases with farm size (as measured by gross sales).

“Large” commercial farm households (farms with annual sales between \$250,000 and \$499,999), on average, obtained 60% of their total household income from farming activities in 2007, while “very large” family farms (farms with annual sales in excess of \$500,000) obtained nearly 80% of household income on-farm. These two classes of farms represented slightly less than 8% of family farms.⁶ Intermediate family farms (farms with annual sales in excess of \$100,000 but less than \$250,000) represented about 28% of family farms and obtained about 32% of household income from on-farm sources. The remaining 64% of family farms are classified as rural residence farms and either receive little or no income from farm sources or their total income level qualifies them as limited-resource farms.

⁵ For more information, see CRS Report RL31095, *Emergency Funding for Agriculture: A Brief History of Supplemental Appropriations, FY1989-FY2006*; and CRS Report RS21212, *Agricultural Disaster Assistance*, both by Ralph M. Chite.

⁶ For more information on farm typology see the ERS Briefing Room, *Farm Household Economics and Well-Being: Farm Operator Household Income Forecasts*, at [<http://www.ers.usda.gov/Briefing/WellBeing/farmhouseincome.htm>].

Table 1. Overview of the U.S. Farm Economy

Commodity	2003	2004	2005	2006	2007F ^a	2008F ^a
(\$ billions)						
1. Cash receipts	215.6	237.3	240.7	239.3	285.4	313.2
<i>Crops^b</i>	109.9	113.7	115.9	120.0	143.9	174.6
<i>Livestock</i>	105.6	123.6	124.9	119.3	141.4	138.7
2. Government payments^c	16.5	13.0	24.4	15.8	12.0	13.4
<i>Fixed direct payments^d</i>	6.4	5.2	5.2	5.1	5.2	5.3
<i>CCP^e</i>	2.3	1.1	4.1	4.0	1.2	0.9
<i>Marketing Loan Benefits^f</i>	1.3	3.5	7.1	1.8	0.9	0.0
<i>Conservation</i>	2.2	2.3	2.8	3.0	3.0	3.0
<i>Ad hoc and emergency</i>	3.1	0.6	3.2	0.3	0.6	3.4
<i>All other^g</i>	1.2	0.2	2.1	1.7	1.0	0.8
3. Farm-related income^h	15.7	17.1	16.2	17.5	18.8	19.4
4. Gross cash income (1+2+3)	247.8	267.4	281.3	272.5	316.2	346.0
5. Cash expenses	177.6	185.2	195.5	204.7	228.6	249.4
6. NET CASH INCOME (4-5)	70.2	82.2	85.8	67.9	87.6	96.6
7. Total gross revenues ⁱ	260.0	296.0	299.6	291.5	345.7	371.5
8. Total production expenses ^j	200.3	210.0	222.5	232.5	257.0	279.2
9. NET FARM INCOME (7-8)	59.7	85.9	77.1	59.0	88.7	92.3
Farm Assets	1,378.8	1,584.8	1,769.3	1,979.1	2,222.6	2,514.1
Farm Debt	175.1	183.0	193.2	207.3	219.9	227.9
Farm Equity	1,203.6	1,401.9	1,576.1	1,771.8	2,002.7	2,286.2
Debt-to-asset ratio (expressed as %)	12.7%	11.5%	10.9%	10.5%	9.9%	9.1%
	2003	2004	2005	2006F^a	2007F^a	2008^a
Average farm household income	\$68,597	\$81,596	\$81,420	\$80,331	\$83,622	\$89,343
Average U.S. household income	\$59,067	\$60,528	\$63,344	\$66,570	na	na

Source: USDA, Economic Research Service, briefing rooms: *Farm Income and Costs: Farm Sector Income*, and *Costs: Farm Sector Income*, available at [<http://www.ers.usda.gov/Briefing/FarmIncome/>]; U.S. farm income data updated as of Feb. 12, 2008.

na = not available.

a. F = forecast.

b. Includes CCC loans.

c. For more information on U.S. farm commodity programs, see CRS Report RS21999, *Farm Commodity Policy: Programs and Issues for Congress*, by Jim Monke; for more information on conservation programs see CRS Report RL33556, *Soil and Water Conservation: An Overview*, by Jeffrey Zinn.

d. Direct payments include production flexibility payments of the 1996 Farm Act through 2001, and fixed direct payments under the 2002 Farm Act since 2002.

e. CCP = counter-cyclical payments.

f. Includes LDP = loan deficiency payments; MLG = marketing loan gains; and commodity certificate exchange gains.

g. Peanut quota buyout, milk income loss payments, and other miscellaneous program payments.

h. Income from custom work, machine hire, recreational activities, forest product sales, and other farm sources.

i. Gross cash income plus inventory adjustments, the value of home consumption, and the imputed rental value of operator dwellings.

j. Cash expenses plus depreciation and perquisites to hired labor.

Table 2. U.S. Prices and Loan Rates for Selected Farm Commodities, 1998/1999-2007/2008F

Commodity	Unit	Year	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08F	% Change ^e	2008/09F	Loan rate	Target Price
Wheat ^a	\$/bu	Jun-May	2.48	2.62	2.78	3.56	3.40	3.40	3.42	4.26	6.55-6.75	56.1%	—	2.75	3.92
Corn ^a	\$/bu	Sep-Aug	1.82	1.85	1.97	2.32	2.42	2.06	2.00	3.04	4.10-4.50	41.4%	—	1.95	2.63
Sorghum ^a	\$/bu	Sep-Aug	1.57	1.89	1.94	2.32	2.39	1.79	1.86	3.29	3.95-4.35	26.1%	—	1.95	2.57
Barley ^a	\$/bu	Jun-May	2.13	2.11	2.22	2.72	2.83	2.48	2.53	2.85	4.00-4.10	42.1%	—	1.85	2.44
Oats ^a	\$/bu	Jun-May	1.12	1.10	1.59	1.81	1.48	1.48	1.63	1.87	2.50-2.60	36.4%	—	1.33	1.44
Rice ^a	\$/cwt	Aug-Jul	5.93	5.61	4.25	4.49	8.08	7.33	7.65	9.96	12.05-12.35	22.0%	—	6.50	10.50
Soybeans ^a	\$/bu	Sep-Aug	4.63	4.54	4.38	5.53	7.34	5.74	5.66	6.43	10.00-10.50	59.4%	—	5.00	5.80
Soybean oil ^b	¢/lb	Oct-Sep	15.6	14.1	16.5	22.0	30.0	23.0	23.4	31.0	50.0-54.0	67.6%	—	—	—
Soybean meal ^b	\$/st	Oct-Sep	154.1	173.6	167.7	181.6	256.1	182.9	174.2	205.4	315-335	58.2%	—	—	—
Cotton, Upland ^c	¢/lb	Aug-Jul	45.0	49.8	29.8	44.5	61.8	41.6	47.7	46.5	56.2 ^c	20.9%	—	52.0	72.4
Choice Steers ^d	\$/cwt	Jan-Dec	65.6	70.0	72.6	67.0	84.7	84.8	87.3	85.4	91.8	7.5%	88-92	—	—
Barrows/Gilts ^d	\$/cwt	Jan-Dec	34.0	45.3	45.8	34.9	39.5	52.5	50.1	47.3	47.1	-0.4%	40-42	—	—
Broilers ^d	¢/lb	Jan-Dec	58.1	56.2	59.1	55.6	62.0	74.1	70.8	64.4	76.4	18.6%	78-82	—	—
Eggs ^d	¢/doz	Jan-Dec	65.6	68.9	67.1	67.1	87.9	82.2	65.5	71.8	114.4	59.3%	125-132	—	—
Milk ^d	\$/cwt	Jan-Dec	14.35	12.32	14.98	12.11	12.52	16.05	15.14	12.90	19.13	48.3%	17.65-18.15	—	—

a. Season average farm price from USDA, National Agricultural Statistical Service, *Agricultural Prices*. Calendar year data is for the first year, e.g., 2000/2001 = 2000; F = forecast from *World Agricultural Supply and Demand Estimates* (WASDE) April 9, 2008; — = no loan rate; and USDA's out-year 2008/2009 crop price forecasts will first appear in the May 2008 WASDE report. WASDE reports are available at [<http://www.usda.gov/oce/commodity/wasde/>].

b. USDA, Agr. Marketing Service (AMS), Decatur, IL, cash price, simple average crude for soybean oil, and simple average 48% protein for soybean meal.

c. Average farm price received for August-December 2007. USDA is prohibited by law from publishing cotton price projections [12 U.S.C. 1141(j)(d)].

d. USDA, AMS: choice steers — Nebraska, direct 1100-1300 lbs.; barrows/gilts — national base, live equivalent 51%-52% lean; broilers — wholesale, 12-city average; eggs — Grade A, New York, volume buyers; and milk — simple average of prices received by farmers for all milk.

e. Percent change from 2006/07, calculated using the difference from the midpoint of the range for 2007/08 with the estimate for 2006/07.